EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael P. Straub on 25 March 2009.

The application has been amended as follows:

In the specification, page 16 lines 30-31:

Directory Access Protocol (v3) which can be obtained from the IETF website ~~at: http://www.ietf.org/rfc/rfc2251.txt~~. Routines 312 include a global initialization routine

In the claims:

Claims 1-2 (canceled):

Claim 3 (Currently Amended): A centralized method of providing admission control functionality in a communications system including a plurality of nodes, said plurality of nodes including a control node, at least a first node coupled to a second node by a first link, a third node coupled to the second node by a second link and a fourth node coupled to the third node by a third link, the control node coupled to at least one of said first, second, third, and further nodes, the method comprising:

maintaining a set of link bandwidth utilization information, the set of link bandwidth utilization information including bandwidth utilization statistics for at least each of the first, second and third nodes;

operating the control node to receive a service request corresponding to the first node and to determine from said maintained set of link bandwidth utilization information if there is sufficient bandwidth available on at least said second and third links to satisfy said service request; and

operating the control node to generate the link bandwidth utilization information corresponding to said second link from an estimate of bandwidth that will be used on said second link by services over which said control node does not have admission control and a sum of services which will use said second link which said control node authorized, said services over which said control node does not have admission control including at least one service that uses a business switch or gateway router to pass traffic over said second link.

Claim 4 (original): The method of claim 3, wherein said link bandwidth utilization information corresponding to said second link is further generated as a function of a link utilization scaling factor.

Claim 5 (original): The method of claim 4, wherein best effort Internet traffic is carried over said second link and where said link bandwidth utilization information corresponding to said second link is further generated as a function of the physical link capacity of links used to couple Internet service users to said second link and an average of the physical link capacity which is used over a period of time by said users for Internet service.

Claim 6 (original): The method of claim 5, wherein said control node generates a control message to reduce the amount of bandwidth allocated to best effort traffic on one of said first, second and third links, when a service request for a service requiring a guaranteed amount of bandwidth on said one of said first, second and third links is received and said guaranteed amount of bandwidth is not available due to best effort traffic on said one of said first, second and third links.

Claim 7 (canceled):

Claims 8-9 (canceled):

Claim 10 (Previously Presented): A centralized method of providing admission control functionality in a communications system including a plurality of nodes, said plurality of nodes including a control node, at least a first node coupled to a second node by a first link, a third node coupled to the second node by a second link and a fourth node coupled to the third node by a third link, the control node coupled to at least one of said first, second, third, and further nodes, the method comprising:

maintaining a set of link bandwidth utilization information, the set of link bandwidth utilization information including bandwidth utilization statistics for at least each of the first, second and third nodes;

operating the control node to receive a service request corresponding to the first node and to determine from said maintained set of link bandwidth utilization information if there is sufficient bandwidth available on at least said second and third links to satisfy said service request;

when it is determined from said maintained set of link bandwidth utilization information that there is insufficient bandwidth available to satisfy said service request, determining if a user to whom said service request corresponds is using other services which ~~can~~ could be terminated to provide the bandwidth required to satisfy said service request;

when it is determined that said user to whom said service request corresponds is using other services which could be terminated to provide the bandwidth required to satisfy said service request, presenting the user with the option of terminating the services being provided to said user which could be used to provide the bandwidth required to satisfy the service request;

operating the control node to receive a reply from said user indicating a desire to terminate services or not to terminate services;

denying said service request when said reply indicates a desire not to terminate services; and

granting said service request when said reply indicates a desire to terminate services.

Claim 11 (original): The method of claim 10, where said step of granting said service request includes:

operating the control node to terminate at least some services provided to said user and to reallocate at least some of the bandwidth used by said services to providing the requested service.

Claim 12 (previously presented): The method of claim 10, wherein presenting the user with the option of terminating the services includes:

providing information to said user through a web interface indicating which services are available for termination.

Claim 13-14 (canceled):

Claim 15 (Currently Amended): A communications system comprising:

a first node;

a second node coupled to the first node by a first link;

a third node coupled to the second node by a second link;

a fourth node coupled to the third node by a third link; and

a control node coupled to at least one of said first, second, third, and further nodes, said control node including and maintaining a set of link bandwidth utilization information, the set of link bandwidth utilization information including bandwidth utilization statistics for at least each of the first, second and third nodes; said control node further including:

means for receiving a service request corresponding to the first node and to determine from said maintained set of link bandwidth utilization information if there is

sufficient bandwidth available on at least said second and third links to satisfy said service request, and wherein said control node further comprises:

means for generating link bandwidth utilization information corresponding to said second link from an estimate of bandwidth that will be used on said second link by services over which said control node does not have admission control and a sum of services which will use said second link which said control node authorized, said services over which said control node does not have admission control including at least one service that uses a business switch or gateway router to pass traffic over said second link.

Claim 16 (original): The system of claim 15, wherein said link bandwidth utilization information corresponding to said second link is further generated as a function of a link utilization scaling factor.

Claim 17 (original): The system of claim 16, wherein best effort Internet traffic is carried over said second link and where said link bandwidth utilization information corresponding to said second link is further generated as a function of the physical link capacity of links used to couple Internet service users to said second link and an average of the physical link capacity which is used over a period of time by said users for Internet service.

Citations of Pertinent Prior Art

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ludwig et al. (PG Pub US 2005/0144284 A1) discloses a networked multimedia system comprising a plurality of workstations and at least one storage server.

Eytchison et al. (US Patent No. 7,412,538 B1) discloses a request even manager for a network of consumer electronic devices.

Elliott (US Patent No. 7,145,898 B1) discloses telephone calls data and other multimedia information is routed through a hybrid network which includes transfer of information across the internet utilizing telephony routing information and internet protocol address information.

Kahveci et al. (US Patent No. 6,938,080 B1) discloses a residential access node (RAN) running a RAN platform 112 which includes means for interfacing a plurality of peripheral equipment such as analog (POTS) phones 114, standard televisions 116, computers 118, IP telephones 120, and high definition televisions 122 to a packet data network 100.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTINE DUONG whose telephone number is (571)270-1664. The examiner can normally be reached on Monday - Friday: 830 AM-6 PM EST with first Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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03/26/2009